

METHOD OF MANUFACTURING A SEMICONDUCTOR COMPONENT, AND
SEMICONDUCTOR COMPONENT FORMED THEREBY

ABSTRACT OF THE DISCLOSURE

A method of manufacturing a semiconductor component includes: providing a semiconductor substrate (210, 510); forming a trench (130, 430) in the semiconductor substrate to define a plurality of active areas separated from each other by the trench; forming a buried layer (240, 750) in the semiconductor substrate underneath a portion of the trench, where the buried layer is at least partially contiguous with the trench; after forming the buried layer, depositing an electrically insulating material (133, 810) in the trench; forming a collector region (150, 950) in one of the plurality of active areas, where the collector region forms a contact to the buried layer; forming a base structure over the one of the plurality of active areas; and forming an emitter region over the one of the plurality of active areas.